

Allied Health Safety Manual and Laboratory Student Agreement  
Science and Health Department  
University of Cincinnati-Clermont College

(SH Safety Committee)  
November 3, 2015

Nestor Hilvano (Chair)  
Nick Maiorano (Secretary)  
Fannie Courtier  
Jennifer Kroger  
Rebecca Larue  
Thomas Sylvest

## PREFACE

This manual serves as a resource document in compliance with University of Cincinnati (UC) Environmental Health and Safety, accreditation boards, and various state and federal organizations (Environmental, Occupational Health, and Safety).

Laboratories must develop written manuals which include specialized safety procedures, respective to discipline (Allied Health, Biology, and Chemistry), for all facets of laboratory activities.

The UC Clermont College-Science and Health Department will distribute this to the appropriate personnel and incorporate these policies into annual safety training.

The development and revision of detailed, written procedures is essential to establishing consistency, training personnel, and facilitating the recognition and compliance to workplace safety.

Additionally, these protocols are integral to a defensible and demonstrable safety program under the review of OSHA (Occupational Safety and Health Administration) or other agencies.

An effective safety program ensures that functioning policies are established, enforced, and effectively taught and documented. Policies can be adapted for individual lab activity purposes.

The development and implementation of UC Clermont College-Science and Health Safety Plan fosters a safer working environment and promotes a reduction of laboratory accidents and injuries.



## Table of Contents

	Page
Table of Contents	1
Instructor Compliance and Enforcement	2
Laboratory Safety Manual in Chemistry Area	3-5
Medical Assisting/ Multi-Skilled Health Technician Laboratory Student Agreement	6-7
PTA Laboratory Student Agreement- Consent and Release for PTA Lab Activities and Travel as a Student Subject	8
Respiratory Care Laboratory Student Agreement	9
EMS Laboratory Student Agreement	10
Surgical Technology Laboratory Student Agreement	11

#### Instructor Compliance and Enforcement:

1. It is the responsibility of the instructor to ensure the safety of each person working or volunteering in the laboratory.
2. Instructors must know the laboratory safety guidelines and procedures approved for the Science and Health Department.
3. Instructors must abide by all safety policies and procedures particular to their discipline and laboratory specific agreements.
4. At the start of each semester, instructors must provide and review the safety policies associated with their particular laboratory.
  - a. Provide demonstration/ explanation about the location and use of safety equipment and proper use of laboratory items.
  - b. Review emergency procedures related to a fire emergency, tornado, act of violence, needle stick/ sharps injury, etc.
5. Instructors will ensure compliance with the approved safety policies with all students, volunteers or other people who enter their laboratory.
6. Instructors will document and report any lab-related incident to the laboratory personnel, program coordinator or the department chair.
7. The S&H Department Chair will be responsible for addressing any situation involving non-complaint students, staff, or faculty.
8. The S&H Department Chair will be responsible for enforcing consequences in cases of non-compliance in relation to the approved safety policies.

Laboratory Safety Manual in Allied Health Area  
Science and Health Department- Safety Committee  
University of Cincinnati Clermont College

This manual provides general guidelines and basic rules within the Allied Health division to:

- a) encourage awareness of the risks in participating in clinical laboratory procedures
- b) promote safe and best practices in the clinical laboratory
- c) protect and promote the wellness and health of students, staff and faculty and visitors

All courses involving biological agents must follow guidelines in the University of Cincinnati Biological Laboratory Safety Manual, which contains the minimum precautions and procedures required in Biosafety Levels 1 and 2. These guidelines pertain to and must be adhered to by all staff, faculty, students and guests that enter the laboratory to perform any activity or observation. Additional references include:

1. University of Cincinnati, Environmental Health and Safety <https://ehs.uc.edu/>
2. Journal of Microbiology and Biology Education, May 2013, p. 78-83.
3. Laboratory Biosafety Manual, 3rd edition; The World Health Organization, 2004.
4. Biohazards in Microbiological and Biomedical Laboratories, 4<sup>th</sup> edition, Centers for Disease Control and Prevention, 1999.

**Agent Risk Group:**

The biological and physical nature of human pathogens can be categorized into risk groups (RG) based on the transmissibility, invasiveness, virulence (i.e., ability to cause disease), and the lethality of the specific pathogen. Risk groupings of infectious agents (RG1 through RG4) generally correspond to biosafety levels (BL1 through BL4), which describe containment practices, safety equipment, and facility design features recommended for safe handling of these microorganisms. A parallel series of animal biosafety levels (ABSL1 through ABSL4) applies to handling of infected or potentially infected animals.

1. **Risk Group 1** agents are not associated with disease in healthy human adults (ex. *Bacillus subtilis*, *Escherichia coli* K12, *adeno-associated virus* (AAV)).
2. **Risk Group 2** agents are associated with human disease which is rarely serious; treatment is usually available (ex. *Staphylococcus aureus*, *Salmonella sp.*, *Herpes simplex viruses*, *Adenovirus*).
3. **Risk Group 3** agents are associated with serious or lethal human disease; treatment may be available; low community risk (ex. *Mycobacterium tuberculosis*, *Bacillus anthracis*, *HIV*).
4. **Risk group 4** agents are associated with serious or lethal human disease; treatment is not usually available, high community risk (ex. *Ebola virus*, *Marburg virus*, *Lassa virus*). Not currently permitted for use at the University of Cincinnati.

**Personal Protection Requirements:**

1. Protective clothing such as lab coat or scrubs is required when working with biohazardous materials (blood, OPIM) or providing direct patient care (varied by discipline).
2. Tie back long hair or hair that falls into the face when working in the allied health laboratories.
3. Pants/jeans/scrubs should be worn in the laboratory. Skirts of any length are prohibited (accommodations will be made for those students requiring exemptions to the standard dress code. Approval must be obtained PRIOR to the first laboratory session).
4. Attire should be professional and not revealing.

5. Gloves are required whenever there is the potential for contact with biohazardous materials (RG2 or BSL2) and should never be reused. Do not attempt to wash disposable gloves. Change them when they are dirty, contaminated or ripped. Dispose of properly.
6. Shoes are required at all times. Sandals, flip flops, open-toed shoes, high heels and shoes with mesh tops or holes (Crocs) are strictly prohibited in the laboratory

**General Rules and Standard Laboratory Practices:**

1. Conduct yourself in a responsible manner at all times in the laboratory.
2. Be sure you understand all procedures in any clinical laboratory activity and possible hazards associated with it.
3. Read ALL directions for beginning a clinical laboratory activity several times, and follow directions EXACTLY as they are written. Ask questions if you are not sure how to proceed.
4. Performing unauthorized experiments and using equipment without the express permission of the instructor is strictly prohibited.
5. If spills occur, notify your instructor immediately.
6. No eating, drinking, smoking or applying make-up in the Allied Health laboratories.
7. Notify your instructor of any medical conditions you may have, such as pregnancy, allergies, diabetes, seizures or asthma. It is recommended that the student discuss the participation requirements for the allied health program in which they will work with their family physician for guidance and monitoring. Be sure your instructor has your emergency contact information as well as medical emergency authorization form and any other pertinent information related to your care.
8. Keep your laboratory area clean. Store bags, packs & purses in appropriate places and off the lab tables. Do not handle electronic devices, phones or keys while working in the lab without the permission of your instructor.
9. Be sure to clean your area thoroughly 5-10 minutes before the end of the class and keep the lab space clean for the next class period. Wipe down the counters and put away all equipment in clean, cool & dry condition. Wash your hands before leaving the lab area.
10. The location of exits, safety showers, eye wash, fire extinguishers and the nearest telephone (emergency) should be ascertained before beginning work.

**First Aid:**

1. Report all accidents, spills or broken glassware & equipment, no matter how minor, to your instructor immediately.
2. In the event of a needlestick, notify instructor immediately and follow the policies stated in the UCHS Advisory 12.1. (Link)
  - a. Immerse the injury site in cool, continuously running water and encourage bleeding for at least 15 minutes.
  - b. Wash the site gently with soap to reduce the chance of infection.
  - c. Dry and cover the wound.
  - d. Seek additional treatment as advised by your instructor in compliance with The University Health Services Advisory 12.1 *Needlestick, Other Percutaneous and Mucous Membrane Exposures: <https://ehs.uc.edu/advisories.aspx>*
3. In the event of a blood splash, notify instructor immediately
  - a. Flush area (s) with water and gently clean well with soap
  - b. Irrigate eyes at the emergency eye wash station
  - c. Refer to The University Health Services Advisory 12.1 *Needlestick, Other Percutaneous and Mucous Membrane Exposures: <https://ehs.uc.edu/advisories.aspx>*
4. Know location and proper use of safety equipment.

5. Complete and submit appropriate incident report form for each incident that occurs during lab time. The form can be completed online on the EH&S website at <https://ehs.uc.edu/Accident/newform.asp> or the form can be downloaded for completion offline at <https://ehs.uc.edu/forms>.

**Aseptic Practice:**

1. Wash hands upon entering and before exiting the laboratory. Hand washing is performed by washing with soap and water, and dry with paper towels.
2. Always observe proper aseptic technique as directed by your instructor.
3. Disinfect working areas before and after the laboratory session with provided disinfectant (70% alcohol) known to kill a broad spectrum of microorganisms.
4. Instructor will inform students of safety precautions relevant to each exercise before beginning the exercise.

**Evacuation and Emergency Situations\*:**

1. Familiarize yourself with the evacuation routes and the nearest exits.
2. When the building alarm sounds all must evacuate via the nearest designated emergency exit and proceed to the designated assembly areas.
3. Follow directions given to you by your instructor, supervisor, manager, and/ or emergency officer.
4. In case of a fire, immediately vacate the building via the nearest exit route. Do not use elevators. Assist disabled persons in exiting the building.
5. The safety of all people is of foremost importance. But do not endanger yourself.

- <http://www.uc.edu/publicsafety/staying-safe/preparedness.html>

**Documentation of Practices:**

1. Requires students to sign Laboratory Student Agreements at the start of each semester.
2. Prepare and keep laboratory attendance sheet.
3. Make Material Safety Data Sheets (MSDS) available at all times. After June 1, 2016, these will be Safety Data Sheets (SDS).

## Medical Assisting/ Multi-Skilled Health Technician Laboratory Student Agreement

All students participating in a Medical Assisting/ Multi Skilled Health Technology lab section are responsible for reading, reviewing and signing the safety policies at the start of the class, prior to the first lab. The rules are designed to give you and fellow students a safe and educational lab experience. Most accidents or injuries can be prevented by using common sense and following the policies listed below. Violation of the agreement could result in removal from the lab.

### Laboratory Policies:

1. I am aware of the Technical Standards/ Essential Functions regarding the clinical competencies required of me in this class and that failure to meet these standards may be grounds for program/class dismissal.
2. Students are permitted in the lab only when a faculty/staff member is present.
3. Minors are not permitted in the lab at any time unless approved by the instructor PRIOR to class with signed waiver.
4. Proper attire must be worn at all times.
  - Program scrubs, lab coat and laboratory-safe shoes are mandatory.
    - Shoes are required at all times.
    - Sandals, flip flops, open-toed shoes, high heels and shoes with mesh tops or holes (Crocs) are strictly prohibited in the laboratory.
    - Long pants are required (NO SHORTS/ SKIRTS of any length).
      - Accommodations will be made for those students requiring exemptions to the standard dress code. Approval must be obtained PRIOR to the first laboratory session.
    - Bare midriffs, low-cut necklines/waistlines are prohibited
    - Lab/classroom temperatures can fluctuate, so be prepared.
5. Long hair/ hair that falls into the face must be pulled back during laboratory time.
6. Personal hygiene is a must in this class. Because we are working closely with other students and volunteer patients, it is mandatory each student showers/bathes regularly, wears clean scrubs/ clothes/ lab coat and uses deodorant. Additionally, strong odors can exacerbate medical conditions including asthma, so please refrain from using perfumes, body sprays, etc. before coming to lab.
7. Fingernails must be of 1/4" white showing. No jagged edges, jewels, sequins, etc. are permitted in the lab for any reason.
8. The use of Personal Protective Equipment (PPE) is MANDATORY. Sometimes it is necessary to utilize additional measures of PPE (i.e. disposable mask if upper respiratory illness symptoms are present). Please request disposable mask if you have nasal congestion, cough, sore throat or feel as though you may be ill.

\*If you fail to meet the dress code standards, you will be asked to leave lab for the day and marked absent

9. Food, drinks, candy, and gum must not enter the laboratory. Food and drink is to be left outside the lab or stored in a book bag. This includes capped bottled water and soft drinks.
10. Students must be in control of their faculties to participate in the laboratory. If a student is deemed by the instructor, to be impaired in some way the student will not be allowed to complete the lab, will be asked to leave and marked absent for the day.
11. Please report any accidents/injuries/spills immediately to your instructor. The instructor will determine the best way to address the problem.
12. Students must familiarize themselves with the safety equipment in the laboratory. Fire extinguishers, first aid kit, and fire exits.
13. Students may not enter supply cabinets, stockroom without instructor supervision.
14. Broken glassware should be swept up with a broom and dust pan and placed in the sharps container. Never place broken glass in the regular garbage can.
15. All needles and syringes and vacutainer tubes filled with real/ artificial blood are to be placed in a sharps container.
16. NEVER reach into a sharps container for any reason. Please notify instructor if anything accidentally falls into these containers.
17. Venipuncture and capillary punctures, on a lab partner or volunteer patient, are allowed only in the presence of a lab instructor.
18. Cell phones should not be used in the laboratory. No talking or texting while engaged in lab activities.
19. Deliberate misuse of instruments or disturbing behavior may result in disciplinary action.
20. Student's hands, must be washed or sanitized prior to practicing clinical competencies or performing clinical skills with a lab partner.
21. I understand that any tests, measurements and/or therapeutic interventions are performed for the purposes of instruction and practice and that they are not intended to be diagnostic or therapeutic for me or any volunteer patient personally.
22. An appropriate atmosphere should be maintained at all times, including proper dress and use of professional language. Foul language and cursing will not be tolerated for any reason. If unprofessional behavior or foul language occurs, the student will not be allowed to complete the lab, will be asked to leave and marked absent for the day.
23. Student's hands, work surface and patient care areas must be cleaned before leaving lab each day. All garbage is to be placed in proper waste container and surfaces must be wiped down with provided disinfecting wipes/ spray. Supplies must be re-stocked by designated student of the week.

Student Agreement:

I have read and agree to follow the Medical Assisting/ Multi-Skilled Health Technology (Phlebotomy) Lab Student Agreement. I am aware that the instructor and /or laboratory staff has the right to report on or remove me from the laboratory if I fail to adhere to these policies. Furthermore, I understand that my instructor may deduct points for failure to obey these laboratory policies.

Printed Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

PTA Laboratory Student Agreement  
Consent and Release for PTA Lab Activities and Travel as a Student Subject  
Academic Year \_\_\_\_\_

1. In connection with laboratory activities included in the curriculum of the PTA Program at the University of Cincinnati-Clermont College, I hereby volunteer and consent to the performance on me of certain physical therapy tests, measurements and/or interventions by my fellow classmates and instructors.  
\_\_\_\_student initials
2. I recognize that the risks associated with these tests, measurements, and /or interventions include, but may not be limited to, minimal bruising and muscle soreness.  
\_\_\_\_student initials
3. I understand that these tests, measurements and/or interventions are performed for the purposes of demonstration, instruction and practice and that they are not intended to be diagnostic or therapeutic for me personally.  
\_\_\_\_student initials
4. I affirm that I have disclosed all information concerning my health that is relevant to my participation in laboratory activities to the instructor of the course with which the laboratory activity is associated. (E.g. latex or other allergies, seizure disorders, etc.) I further understand that it is my responsibility to inform by lab partner/classmate if I am unable to perform a specific laboratory activity.  
\_\_\_\_student initials
5. I recognize that I am free to withdraw my consent and discontinue participation as a subject in the laboratory activity at the time without any impact on my grade in the course (if a student) with which the laboratory activity is associated.  
\_\_\_\_student initials
6. I hereby release the University of Cincinnati-Clermont College, its employees, agents and students from any and all liability, loss or damage arising from, or in any way connected, with the tests, measurements and/or interventions associated with the laboratory activities in the PTA curriculum.  
\_\_\_\_student initials
7. Realizing that during my courses of instruction in the Physical Therapist Assistant Program (Major Code PTA), I will be involved in various class activities or activities to fulfill course requirements, I will not hold the University of Cincinnati-Clermont College, any of its employees, any facility affiliated with the University through a clinical contract, or any employee of these facilities responsible for any injuries or loss which might occur while participating in these activities, including travel to sites for observation, i.e., field trips. \_\_\_\_student initials
8. I have read this Consent and Release and understand its contents.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name (printed): \_\_\_\_\_

Address: \_\_\_\_\_

## Respiratory Care Laboratory Student Agreement

All students participating in a Respiratory Care lab section are responsible for reading, reviewing and signing the safety policies at the start of the Program, prior to the first lab. The rules are designed to give you and fellow students a safe and educational lab experience. Most accidents or injuries can be prevented by using common sense and following the policies listed below. Violation of the agreement could result in removal from the lab.

### **Laboratory Policies:**

1. Food, drinks, candy, and gum must not enter the laboratory. Food and drink is to be left outside the lab or stored in a book bag. This includes capped bottled water and soft drinks.
2. Students must be in control of all faculties to participate in the laboratory. If a student is deemed by the instructor, to be impaired in some way the student will not be allowed to complete the lab and will be asked to leave.
3. Please report any accidents/injuries/spills immediately to your instructor. The instructor will determine the best way to address the problem.
4. Students must familiarize themselves with the safety equipment in the laboratory. Fire extinguishers, first aid kit, and fire exits.
5. Broken glassware should be swept up with a broom and dust pan and placed in the sharps container. Never place broken glass in the regular garbage can.
6. All needles and syringes filled with artificial blood are to be placed in the sharps container.
7. Arterial punctures, on a lab partner, are allowed only in the presence of a lab instructor.
8. Cell phones should not be used in the laboratory. No talking or texting while engaged in lab activities.
9. Deliberate misuse of instruments or disturbing behavior may result in disciplinary action.
10. Students must wear closed toed shoes and pants on a lab day dealing with needles, chemical or biological substances. The lab instructor will be responsible for notifying students regarding these lab days.
11. Student's hands, must be washed or sanitized prior to administering therapy or performing a test with a lab partner.
12. I understand that any tests, measurements and/or therapeutic interventions are performed for the purposes of instruction and practice and that they are not intended to be diagnostic or therapeutic for me personally.
13. An appropriate atmosphere should be maintained at all times, including proper dress and use of professional language.

### Student Agreement:

I have read and agree to follow the Respiratory Care Lab Student Agreement. I am aware that the instructor and /or laboratory staff has the right to report on or remove me from the laboratory if I fail to adhere to these policies. Furthermore, I understand that my instructor may deduct points for failure to obey these laboratory policies.

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## EMS Laboratory Student Agreement

All students participating in EMS lab section are responsible for reading, reviewing and signing the safety policies at the start of the Program, prior to the first lab. The rules are designed to give you and fellow students a safe and educational lab experience. Most accidents or injuries can be prevented by using common sense and following the policies listed below. Violation of the agreement could result in removal from the lab.

### Laboratory Policies:

1. Food, drinks, candy, and gum must not enter the laboratory. Food and drink is to be left outside the lab or stored in a book bag. This includes capped bottled water and soft drinks.
2. Students must be in control of all faculties to participate in the laboratory. If a student is deemed by the instructor, to be impaired in some way the student will not be allowed to complete the lab and will be asked to leave.
3. Please report any accidents/injuries/spills immediately to your instructor. The instructor will determine the best way to address the problem.
4. Students must familiarize themselves with the safety equipment in the laboratory. Fire extinguishers, first aid kit, and fire exits.
5. Broken glassware should be swept up with a broom and dust pan and placed in the sharps container. Never place broken glass in the regular garbage can.
6. All needles and syringes filled with artificial blood are to be placed in the sharps container.
7. Arterial punctures, on a lab partner, are allowed only in the presence of a lab instructor.
8. Cell phones should not be used in the laboratory. No talking or texting while engaged in lab activities.
9. Deliberate misuse of instruments or disturbing behavior may result in disciplinary action.
10. Students must wear closed toed shoes and pants on a lab day dealing with needles, chemical or biological substances. The lab instructor will be responsible for notifying students regarding these lab days.
11. Student's hands, must be washed or sanitized prior to administering therapy or performing a test with lab partner.
12. I understand that any tests, measurements and/or therapeutic interventions are performed for the purposes of instruction and practice and that they are not intended to be diagnostic or therapeutic for me personally.
13. An appropriate atmosphere should be maintained at all times, including proper dress and use of professional language.

Student Agreement:

I have read and agree to follow the EMS Lab Student Agreement. I am aware that the instructor and /or laboratory staff has the right to report on or remove me from the laboratory if I fail to adhere to these policies. Furthermore, I understand that my instructor may deduct points for failure to obey these laboratory policies

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Surgical Technology Laboratory Student Agreement

All students participating in Surgical Technology lab section are responsible for reading, reviewing and signing the safety policies at the start of the Program, prior to the first lab. The rules are designed to give you and fellow students a safe and educational lab experience. Most accidents or injuries can be prevented by using common sense and following the policies listed below. Violation of the agreement could result in removal from the lab.

### Laboratory Policies:

1. Food, drinks, candy, and gum must not enter the laboratory. Food and drink is to be left outside the lab or stored in a book bag. This includes capped bottled water and soft drinks.
2. Students must be in control of all faculties to participate in the laboratory. If a student is deemed by the instructor, to be impaired in some way the student will not be allowed to complete the lab and will be asked to leave.
3. Please report any accidents/injuries/spills immediately to your instructor. The instructor will determine the best way to address the problem.
4. Students must familiarize themselves with the safety equipment in the laboratory. Fire extinguishers, first aid kit, and fire exits.
5. Broken glassware should be swept up with a broom and dust pan and placed in the sharps container. Never place broken glass in the regular garbage can.
6. All needles and syringes filled with artificial blood are to be placed in the sharps container.
7. Arterial punctures, on a lab partner, are allowed only in the presence of a lab instructor.
8. Cell phones should not be used in the laboratory. No talking or texting while engaged in lab activities.
9. Deliberate misuse of instruments or disturbing behavior may result in disciplinary action.
10. Students must wear closed toed shoes and pants on a lab day dealing with needles, chemical or biological substances. The lab instructor will be responsible for notifying students regarding these lab days.
11. Student's hands, must be washed or sanitized prior to administering therapy or performing a test with a lab partner.
12. I understand that any tests, measurements and/or therapeutic interventions are performed for the purposes of instruction and practice and that they are not intended to be diagnostic or therapeutic for me personally.
13. An appropriate atmosphere should be maintained at all times, including proper dress and use of professional language.

### Student Agreement:

I have read and agree to follow the Surgical Technology Lab Student Agreement. I am aware that the instructor and /or laboratory staff has the right to report on or remove me from the laboratory if I fail to adhere to these policies. Furthermore, I understand that my instructor may deduct points for failure to obey these laboratory policies

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_